

In rejecting claim 31, the Examiner stated as follows:

"Brionnes discloses a pumpable ANFO explosive mixed by various methods for use in boreholes that comprises diesel fuel with epoxidized soybean oil and ammonium nitrate. The oil separation is an inherent property of this composition"

The applicant respectfully submits that the Examiner has not issued a complete and proper rejection of claim 31. Applicant respectfully notes that "all words in a claim must be considered in judging the patentability of that claim against the prior art" (see MPEP 2143.03). In particular, referring to claim 31, the Examiner did not address the majority of step (b), which recites:

"combining the organic combustible fuel and the chemical coupling agent to produce a liquid mixture and then combining the liquid mixture with the inorganic oxidizer particles to produce a flowable ANFO explosive comprising inorganic oxidizer particles coated with the liquid mixture". (emphasis added)

The rejection of claim 31 does not address how Brionnes teaches this limitation, and thus the rejection does not address how Brionnes teaches each of the limitations of claim 31. Accordingly, the rejection is not properly set out. Claim 31 is the only independent claim currently in the application. If this claim is not rejected, then the dependent claims can not be rejected under either 35 U.S.C. 102(b) or 103.

Applicant requests the Examiner advise the applicant where Brionnes teaches each of the limitations of claim 31, and in particular, step (b) of claim 31.

2. Briones Does Not Disclose an ANFO Explosive

Claim 31 is directed to a method for reducing oil segregation in an ANFO explosive composition, and using the ANFO explosive composition. As stated in the present application (page 1, line 10) and as known in the art, an ANFO explosive is a dry blasting agent.

In rejecting the claims, the Examiner stated "Brionnes discloses a pumpable ANFO explosive...". Applicant respectfully disagrees, and submits that Brionnes does not disclose an ANFO explosive. Throughout the disclosure of Brionnes, it is stated that the explosive disclosed therein is an emulsion explosive. For example, at page 1, lines 5-6, it is stated as follows.

"The invention refers to a new type of emulsion explosives composition..."
(emphasis added).

As is known to those of skill in the art, and as stated by Brionnes (page 1, lines 7-8), an emulsion explosive comprises immiscible liquids. This is in direct contrast to an ANFO explosive, which is a dry blasting agent. Nowhere does Briones teach, disclose, or suggest a method of making or using a dry blasting agent or in particular, an ANFO explosive. Accordingly, Applicant respectfully submits that claim 31 is not anticipated by Brionnes.

3. Brionnes Does Not Disclose Producing Particles Coated with a Liquid Mixture

The explosive of Briones is manufactured by preparing an aqueous solution of oxidizing salts, and then mixing the aqueous solution with the oil phase (see, for example, page 2, lines 46-60). The disclosure of Briones states that the explosive disclosed therein comprises an emulsion of "an aqueous phase that contains inorganic oxidizing salts and an oil phase which contains the fuel" (page 1, lines 12-13). Further, Briones states that the inorganic oxidizer is in the form of a "solution of salts, generally in an aqueous medium" (page 1, line 31). In contrast, claim 31 specifies the following:

"combining the liquid mixture with the inorganic oxidizer particles to produce a flowable ANFO explosive comprising inorganic oxidizer particles coated with the liquid mixture". (emphasis added)

Further, claim 31 specifies that the liquid mixture comprises an "organic combustible fuel and the chemical coupling agent"

Nowhere does Brionnes teach, disclose or suggest producing an ANFO explosive comprising inorganic oxidizer particles coated with a liquid mixture of organic combustible fuel and a chemical coupling agent. Rather, as noted hereinabove, in Brionnes, the inorganic oxidizer is in the form of a "solution of salts, generally in an aqueous medium" (page 1, line 31). Based on the Applicant's understanding of the reference, the inorganic oxidizer in Brionnes is not particulate, and is not combined with a liquid mixture including organic combustible fuel. Accordingly, Applicant requests that claim 31 is not anticipated by Brionnes for at least this reason.

4. Brionnes Teaches Away from Producing Inorganic Oxidizer Particles

Applicant respectfully submits that not only does Brionnes not disclose producing inorganic oxidizer particles coated with a liquid mixture, but in addition, Brionnes teaches away from producing inorganic oxidizer particles at all.

As noted hereinabove, in Brionnes, the inorganic oxidizer is in the form of a salt that is dissolved in water. Throughout Brionnes, it is stated that the inorganic oxidizer salts must be prevented from coming out of solution to form particles. For example, Brionnes states that additives should be added to the explosive to "prevent[s] the possible formation and growth of crystals from the present salts" (Page 1, lines 23-25, see also Page 1, lines 52-53). Accordingly, a person skilled in the art, upon reading Brionnes, would be taught not to use a particulate form of the inorganic oxidizer. This is in direct contrast to the subject matter of claim 31, which specifies "producing inorganic oxidizer particles..." (emphasis added).

Accordingly, Applicant respectfully submits that claim 31 is not anticipated by Brionnes for at least this reason.

In view of the foregoing arguments, Applicant respectfully submits that claim 31 is not anticipated by Brionnes. Claims 32, 33, 35, 36, 38, 43, 44, 48, 49, 51, 53, and 56 are dependent on 31, and thus the foregoing arguments apply equally thereto. As such,

Applicant respectfully submits that claims 31-33 35, 36, 38, 43, 44, 48, 49, 51, 53, and 56 are in condition for allowance.

Claim Rejections 35 USC §103


In the Office Action, the Examiner stated that claims 39-42, 54, and 55 are rejected under 35 USC 103(a) as being unpatentable over Brionnes in view of Richard. Claims 39-42, 54, and 55 are dependent on claim 31, and thus the arguments applied hereinabove with respect to claim 31 apply equally thereto. Accordingly, Applicant respectfully submit that claims 39-42, 54, and 55 are in condition for allowance.

Summary

In view of the forgoing arguments, Applicant respectfully submits that the claims of the present application are in condition for allowance. Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

Respectfully submitted,

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